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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/773,908	02/05/2004	Seock-Hwan Kang	21C-0086	8595
23413	7590	03/01/2007		
CANTOR COLBURN, LLP 55 GRIFFIN ROAD SOUTH BLOOMFIELD, CT 06002			EXAMINER ALEMU, EPHREM	
			ART UNIT	PAPER NUMBER
			2821	
SHORTENED STATUTORY PERIOD OF RESPONSE		MAIL DATE	DELIVERY MODE	
3 MONTHS		03/01/2007	PAPER	

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

**Office Action Summary**

Application No.

10/773,908

Applicant(s)

KANG ET AL.

Examiner

Ephrem Alemu

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 15 November 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-64 is/are pending in the application.
- 4a) Of the above claim(s) 2-4, 13, 18-24, 29, 38, 42-45, 47, 51 and 54-64 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1, 5-7, 9-12, 16-18, 25-28, 30, 31, 33-38, 40, 41, 46, 49, 50 and 53 is/are rejected.
- 7) ☒ Claim(s) 8, 15, 32, 39, 48 and 52 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)             | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. _____  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                                    |

## **DETAILED ACTION**

### ***Election/Restrictions***

1. Applicant's election without traverse of claims 1, 5-12, 14-18, 24-28, 30-37, 39-42, 26-50 and 52-54 corresponding to Species 2 in the reply filed on 5/16/2006 is acknowledged.

After further consideration, the listing of the elected claims that corresponds with species 2 are claims 1, 5-12, 14-17, 25-28, 30-37, 39-41, 46, 48-50 and 52-53. Therefore, claims 2-4, 13, 18-24, 29, 38, 42-45, 47, 51 and 54-56 are withdrawn as being directed to non-elected Species 1 and 3. The examiner respectfully request for the applicant to verify the elected claims corresponding to Species 2 and to clearly identify the claims that corresponds to the non-elected Species 1 and 3.

### ***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1, 5, 9, 10, 12, 14, 16, 17, 25, 34, 35, 46, 49, 50, 52 and 53 are rejected under 35 U.S.C. 102(e) as being anticipated by Cho et al. (US 6,674,250 previously cited by examiner).

Re claims 1, 5, 9 and 10, Cho discloses a lamp (10) for emitting light (Figs. 1-8) comprising:

a lamp body (11) in which a discharge gas (125) is injected (Figs. 1-8);

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a first member (i.e., external electrode 13) that receives a first end portion of the lamp body (11), the first member being electrically conductive (Figs. 1-8; Col. 7, line 48- Col. 8, line 34; wherein the first member of the first electrode has a tube shape having opposite ends of which one is open and the other is closed); and

a second member (i.e., protective film in the inner side of the external electrode 13) disposed between the first member (i.e., external electrode 13) and the lamp body (11), the second member (i.e., protective film in the inner side of the external electrode 13) having metallic solder (i.e., magnesium oxide or calcium oxide, etc.) and being coated on the first end portion of the lamp body to provide adhesion between the first member (i.e., external electrode 13) and the lamp body (11) (Figs. 1-4; Col. 7, line 48- Col. 8, line 34; wherein the second member of the first electrode is airtightly formed to prevent a void gap between the first member (i.e., external electrode 13) and the lamp body (11); and wherein the size of entire inner surface of the first member of the first electrode is substantially identical with a size of entire outer surface of the second member of the first electrode).

Re claims 12, 14, 16 and 17, Cho further discloses the second electrodes (13) having the same structure as the first electrode (13). Therefore, claims 12, 14, 16 and 17 are rejected for the same reason for the structure of the first electrode as discussed above in claims 1, 5, 9 and 10.

Re claim 25, 34, 46 and 49, Cho discloses a display device having a display panel and a light assembly (Figs. 1-4) for providing light, comprising:

a lamp body (11) in which a discharge gas (125) is injected (Figs. 1-8);

first and second electrodes (13) disposed at opposite end of the lamp body , the first and second electrodes receiving current externally provided, wherein the first electrode includes:

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a first member (i.e., external electrode 13) that receives a first end portion of the lamp body (11), the first member being electrically conductive (Figs. 1-8; Col. 7, line 48- Col. 8, line 34; wherein the first member of the first electrode has a tube shape having opposite ends of which one is open and the other is closed); and

a second member (i.e., protective film in the inner side of the external electrode 13) disposed between the first member (i.e., external electrode 13) and the lamp body (11), the second member (i.e., protective film in the inner side of the external electrode 13) having metallic solder (i.e., magnesium oxide or calcium oxide, etc.) and being coated on the first end portion of the lamp body to provide adhesion between the first member (i.e., external electrode 13) and the lamp body (11) (Figs. 1-4; Col. 7, line 48- Col. 8, line 34; wherein the second member of the first electrode is airtightly formed to prevent a void gap between the first member (i.e., external electrode 13) and the lamp body (11); and wherein the size of entire inner surface of the first member of the first electrode is substantially identical with a size of entire outer surface of the second member of the first electrode);

a voltage applying module (Fig. 7) that receives the driving voltage from an external source and providing the driving voltage to the first and second electrodes of the lamp (Fig. 10); and

a receiving container (Fig. 10) that receives and securely holds the lamp (10) and the voltage applying module (Fig. 7).

Re claims 35, 50 and 50, Cho further discloses the second electrodes (13) having the same structure as the first electrode (13). Therefore, claim 35 is rejected for the same reason for the structure of the first electrode as discussed above in claim 25.

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 26, 27, 36 and 37 are rejected under 35 U.S.C. 103(a) as being obvious over Cho et al. (US 6,674,250) in view of Yoo et al. (US 6,905,224 previously cited by Examiner).

Re claims 26, 27, 36 and 37, although, Cho discloses the receiving container including first and second frames for receiving the first and second electrodes of the lamp (Fig. 3e); Cho does not show first and second lamp clips for holding the first and second electrodes of the lamp, the first lamp clip being attached to the first frame, wherein the first and second frames, respectively, including upper and lower parts between which the first and second electrodes of the lamp, respectively being disposed; and a connection part connected with the upper and lower parts, the connection part having an opening through which the first electrode of the lamp is inserted.

However, it is well within the skill of artisan at the time the invention was made to provide such structural modification for the purpose of securely holding the light assembly and the display panel.

In the same field of endeavor, Yoo discloses such feature (Figs. 10-13).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the first and second frames of Cho's light assembly by providing

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clips as claimed in claims 36 and 37 for no other reason than securely holding the display panel and the light assembly.

### ***Double Patenting***

6. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the “right to exclude” granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1, 5-7, 9-12, 16-18, 25-28, 30-31, 33-38, 40, 41, 46, 49, 50 and 53 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-18 of copending Application No. 10/508,587. Although the conflicting claims are not identical, they are not patentably distinct from each other because both the instant application and the '587 co-pending application discloses an image display device (LCD apparatus 800) for displaying images using light internally provided (Fig. 12), comprising:

a display panel (LCD panel 600) to display images using the light and image data externally provided (Fig. 12; paragraph [0063],

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a light assembly (i.e., plurality of lamps 300 received in a receiving container 400) to provide the light, the light assembly comprising:

a lamp (300) including:

a lamp body (110) in which a discharge gas (125) is injected (Figs. 3-8; abstract; page 2, paragraph [0035]);

first and second electrodes (130, 150) disposed at opposite end of the lamp body , the first and second electrodes receiving current externally provided, wherein the first electrode includes:

a first member (136, 137) that receives a first end portion of the lamp body (110), the first member being electrically conductive (Figs. 3-8; abstract; page 2, paragraph [0035] to paragraph [0047]); and

a second member (200) disposed between the first member (136, 137) and the lamp body (110), the second member (200) having metallic solder and being coated on the first end portion of the lamp body to provide adhesion between the first member (136, 137) and the lamp body (110) (Figs. 3-8; abstract; page 2, paragraph [0035] to paragraph [0047]; wherein the second member of the first electrode is airtightly formed to prevent a void gap between the first member and the lamp body).

The '587 co-pending application does not show all the detailed structure of the voltage applying module, the receiving container, and holding members for securely holding the display panel and the light assembly. However, it is well within the skill of artisan at the time the invention was made to provide such structural modification for the purpose of securely holding the light assembly and the display panel. As an example see Hur et al. (US P2004/0232853); Yoo et al. (US 6,905,224); and Cho et al. (US 6,674,250).



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It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the voltage applying module, the receiving container, and holding members of Kim's image display device (LCD apparatus 800) as claimed for no other reason than supplying power voltage to the plurality of lamps and securely holding the display panel and the light assembly.

Regarding the limitation "the second member having metallic solder and being coated on the first end portion of the lamp body by melting to provide adhesion" is not given patentable weight because it is considered a product-by-process claim. "Even though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process." *In re Thrope*, 777 F.2d 695, 698, 227 USPQ 964, 966 (Fed. Cir. 1985). Furthermore, it would have been obvious to melt solder material to provide adhesion.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

***Allowable Subject Matter***

7. Claims 8, 15, 32, 39, 48 and 52 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

8. The following is a statement of reasons for the indication of allowable subject matter:



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The prior art of record fail to teach or suggest, alone or in combination, the following limitations: "wherein the first or second end portion of the lamp body has a rough surface on which the second or fourth member of the first electrode is coated, the rough surface increasing adhesion between the first end portion of the lamp body and the second member of the first electrode" in a manner claimed in claims 8, 15, 32, 39, 48 and 52.

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ephrem Alemu whose telephone number is (571) 272-1818. The examiner can normally be reached on M-F 9:00 AM to 5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Douglas W Owens can be reached on (571) 272-1662. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

EA  
6-05-02



**TUYET VO  
PRIMARY EXAMINER**